

ABSTRACT OF THE DISCLOSURE

A switching power supply unit of the present invention a timing generating circuit (121) which receives a first 5 control signal formed by a rectifier-transistor driving circuit (104), forms a second control signal based on the first control signal, and supplies the second control signal to a control electrode of the rectifier transistor (113).

The first control signal is synchronized with the 0 switching operation of a half-bridge circuit (102), and the second control signal exceeds a threshold voltage of a rectifier transistor (113) at a timing substantially equal to the timing that one edge of the first control signal is generated and falls below the threshold voltage of the 5 rectifier transistor (113) at a timing earlier by predetermined time than the timing that the other edge of the first control signal is generated.